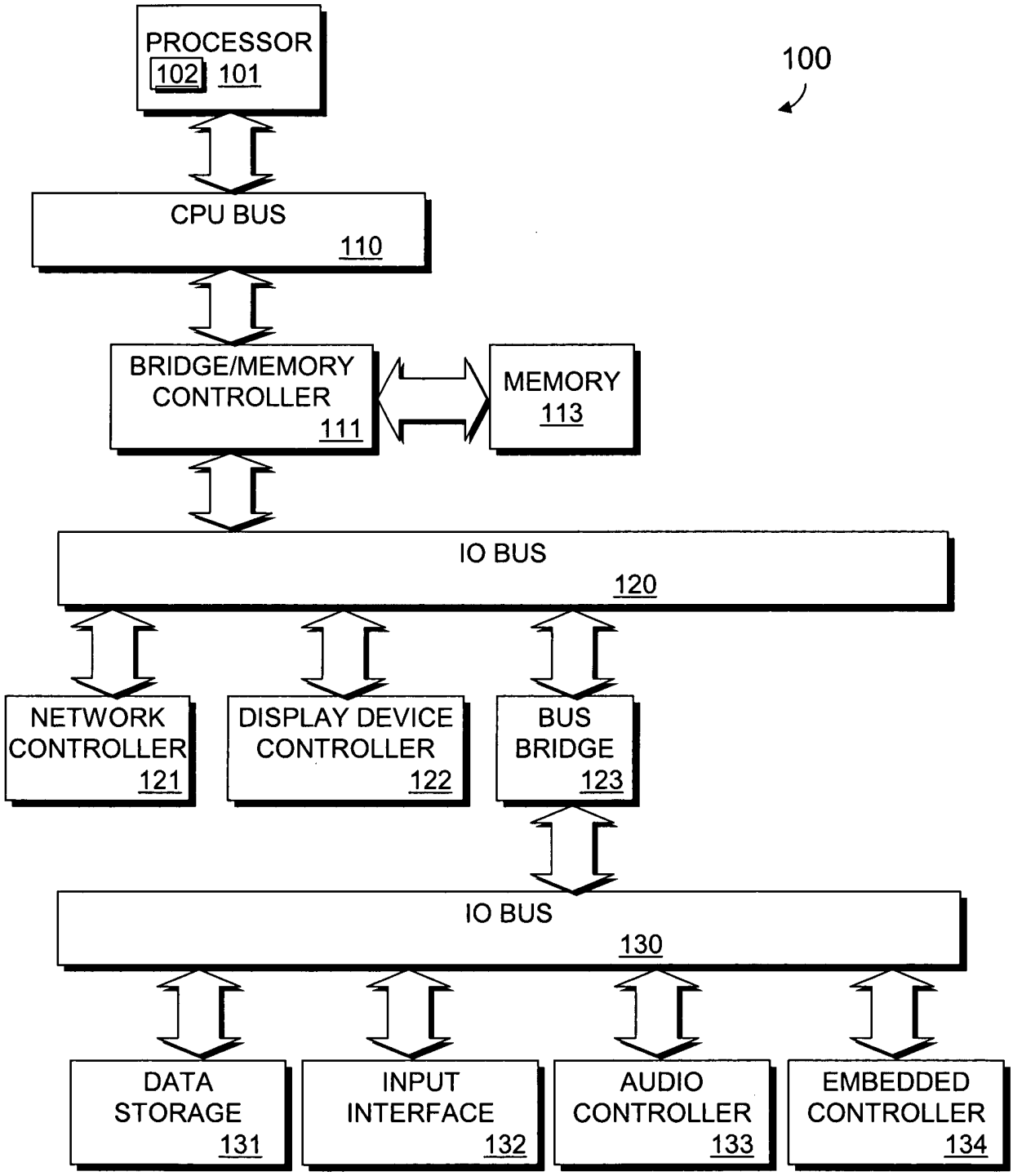
PROCESSOR
102 101
100
CPU BUS
110
BRIDGE/MEMORY
CONTROLLER
111
MEMORY
113
IO BUS
120
NETWORK
CONTROLLER
121
DISPLAY DEVICE
CONTROLLER
122
BUS
BRIDGE
123
IO BUS
130
DATA
STORAGE
131
INPUT
INTERFACE
132
AUDIO
CONTROLLER
133
EMBEDDED
CONTROLLER
134

FIG. 1

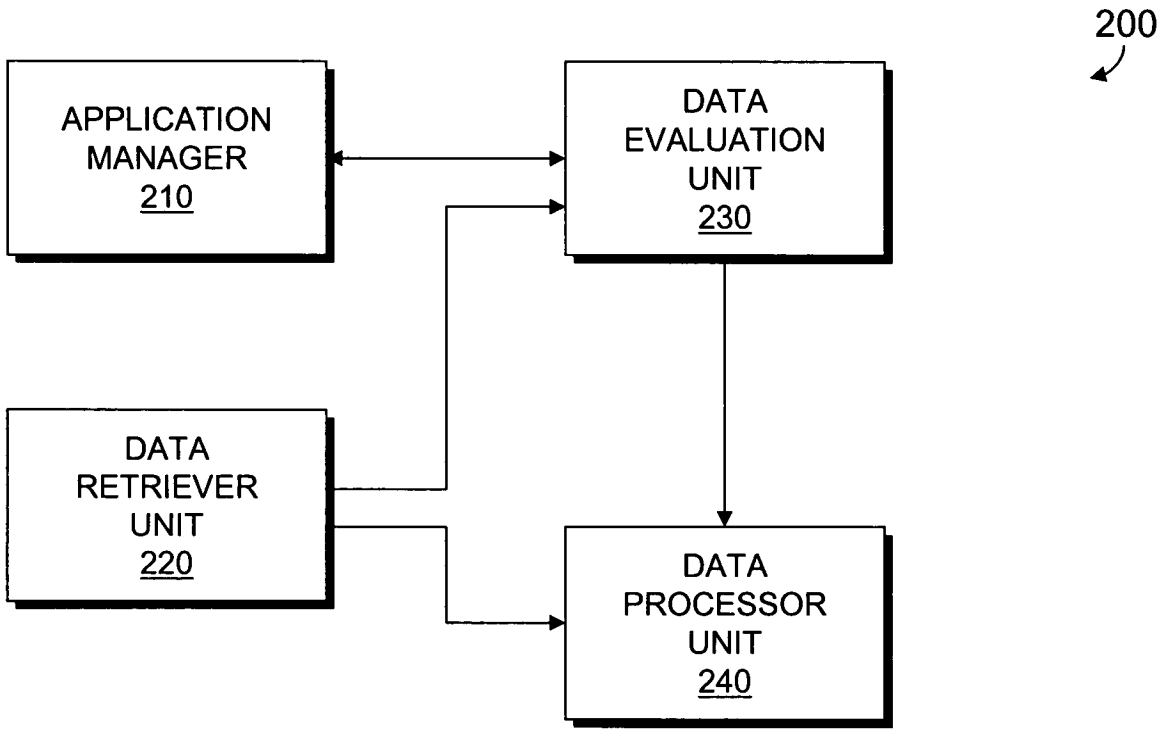
200
APPLICATION MANAGER 210
DATA EVALUATION UNIT 230
DATA RETRIEVER UNIT 220
DATA PROCESSOR UNIT 240

FIG. 2

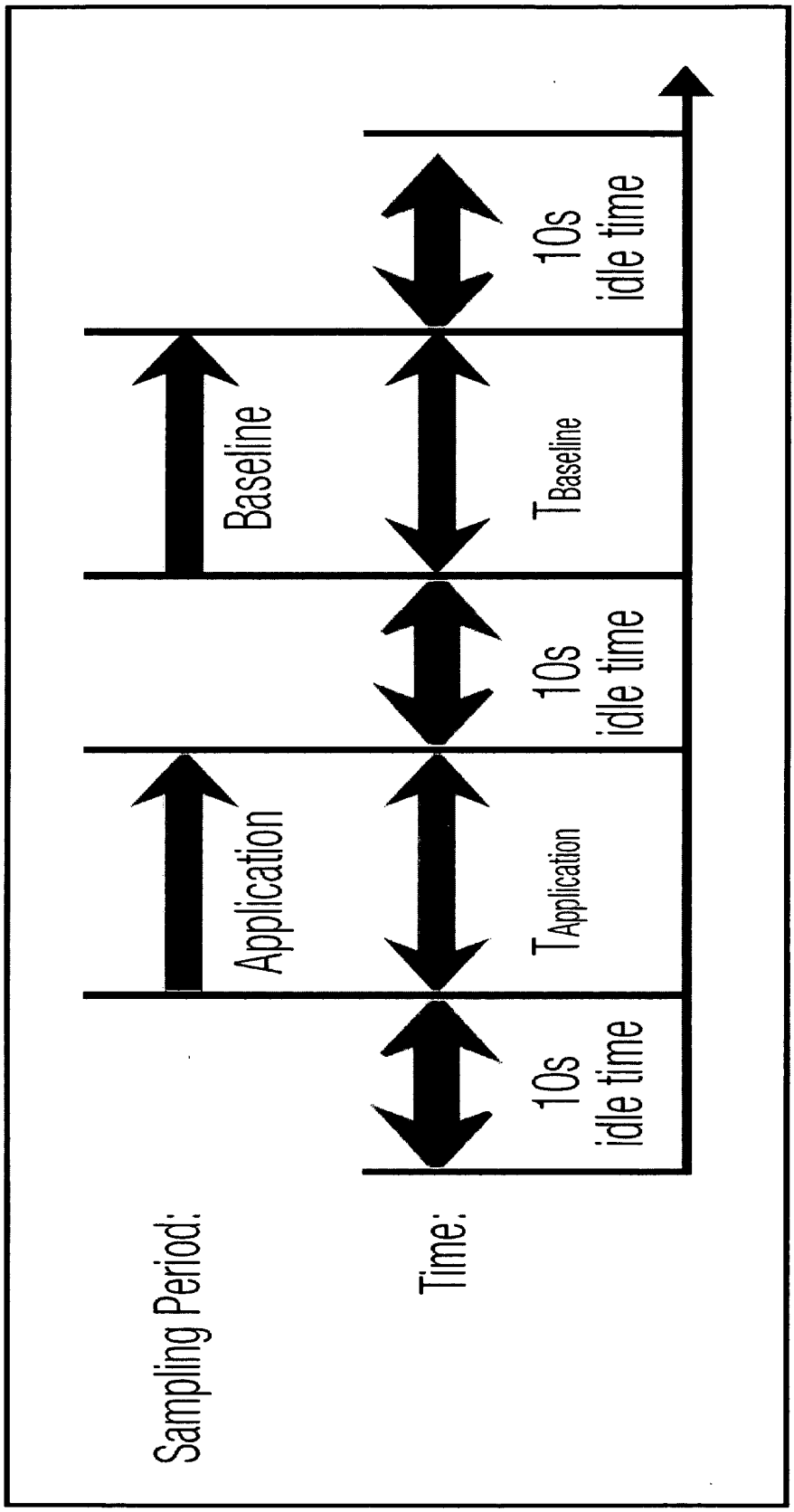

FIG. 3

BEST AVAILABLE COPY

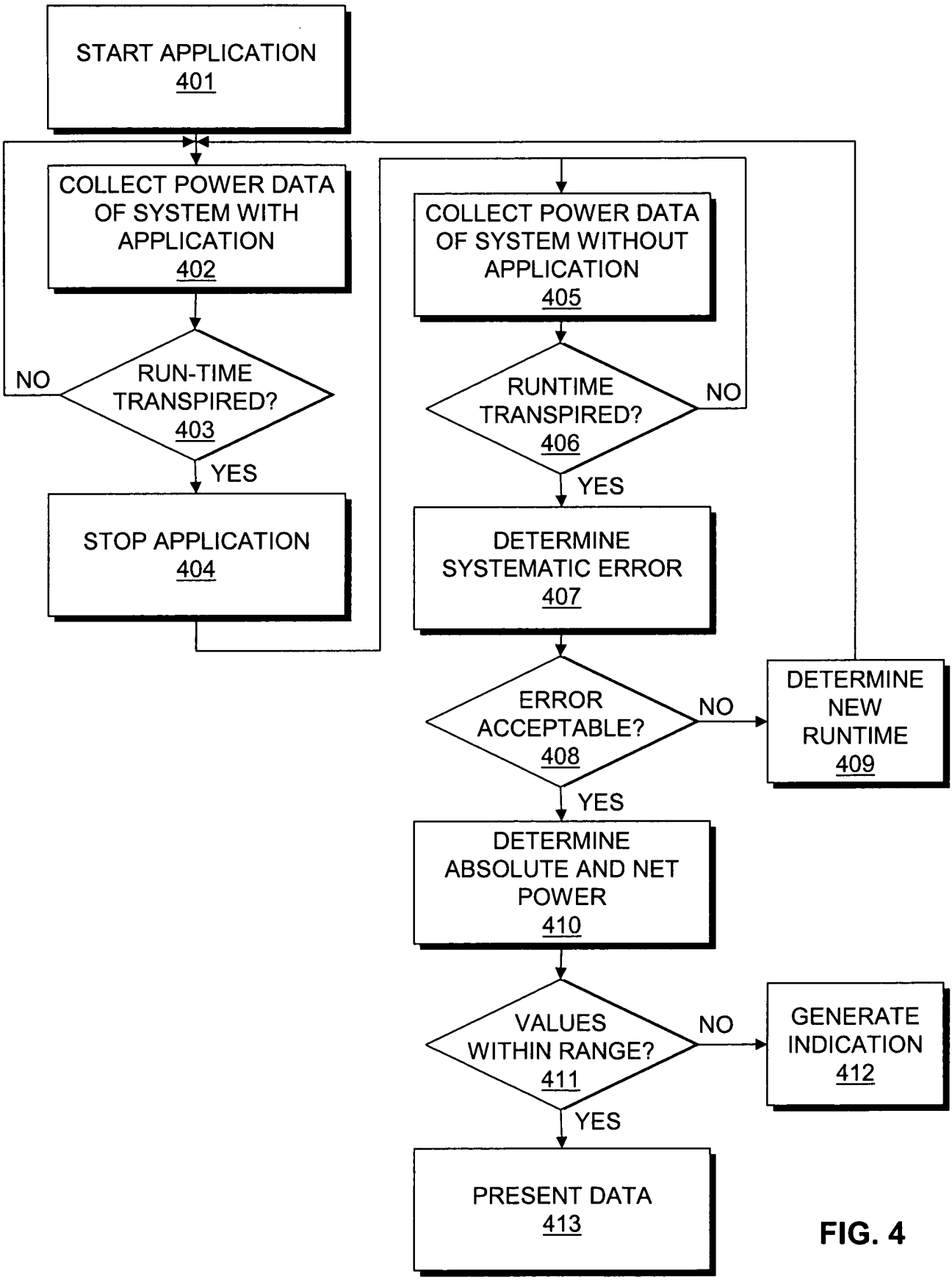
START APPLICATION
401
COLLECT POWER DATA OF SYSTEM WITH APPLICATION
402
RUN-TIME TRANSPIRED?
403
NO
YES
STOP APPLICATION
404
COLLECT POWER DATA OF SYSTEM WITHOUT APPLICATION
405
RUNTIME TRANSPIRED?
406
NO
YES
DETERMINE SYSTEMATIC ERROR
407
ERROR ACCEPTABLE?
408
NO
DETERMINE NEW RUNTIME
409
YES
DETERMINE ABSOLUTE AND NET POWER
410
VALUES WITHIN RANGE?
411
NO
GENERATE INDICATION
412
YES
PRESENT DATA
413

FIG. 4

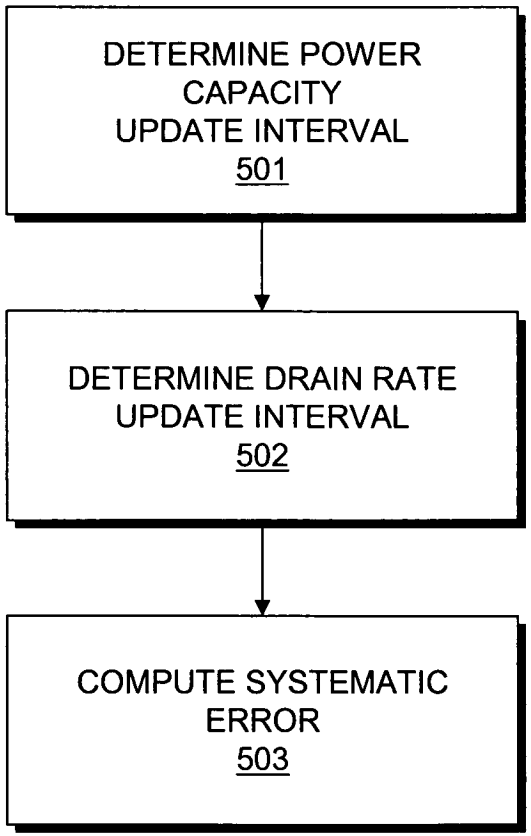
DETERMINE POWER CAPACITY UPDATE INTERVAL
501
DETERMINE DRAIN RATE UPDATE INTERVAL
502
COMPUTE SYSTEMATIC ERROR
503

FIG. 5

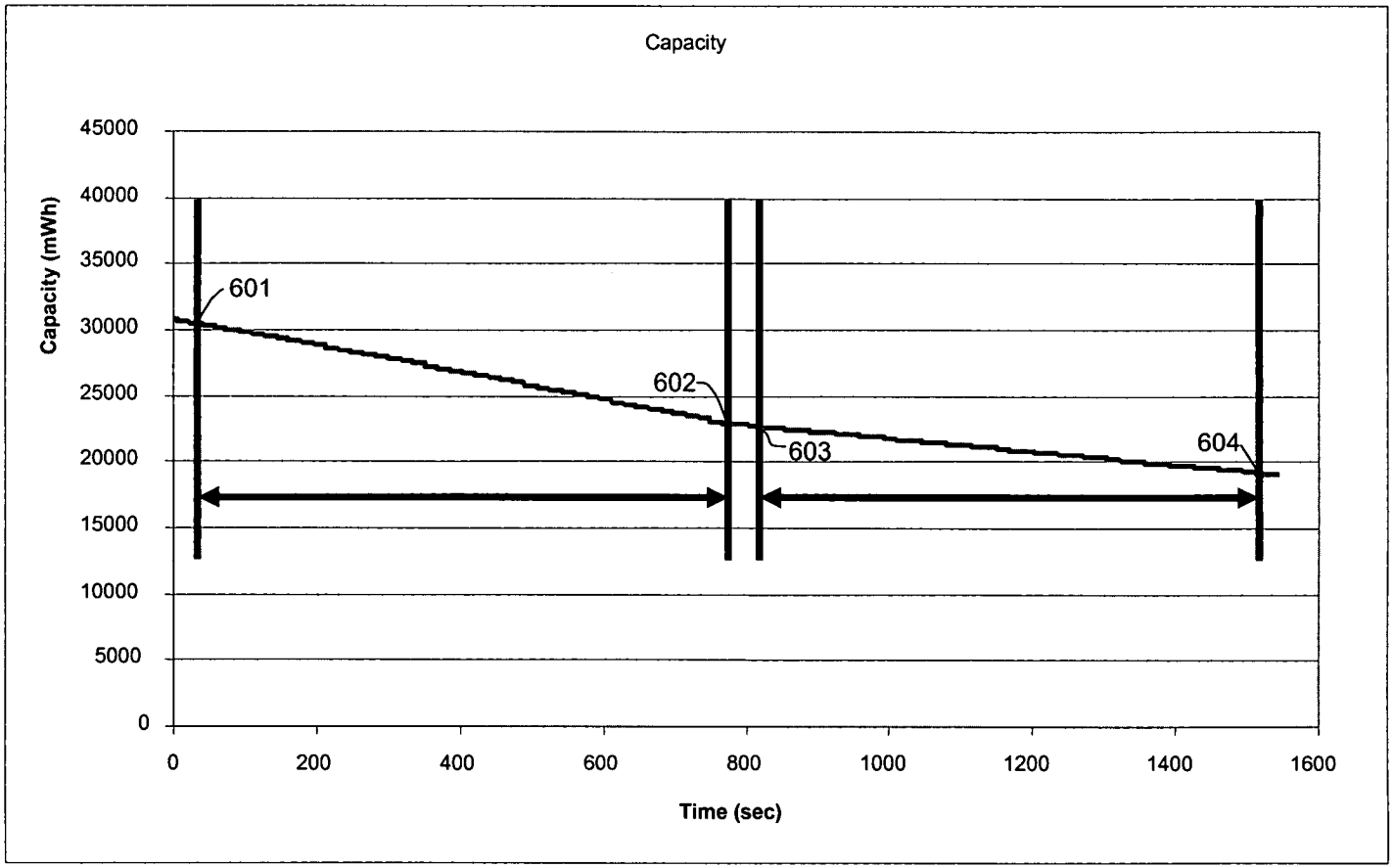
Capacity
Capacity (mWh)
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
601
602
603
604
0
200
400
600
800
1000
1200
1400
1600
Time (sec)

FIG. 6

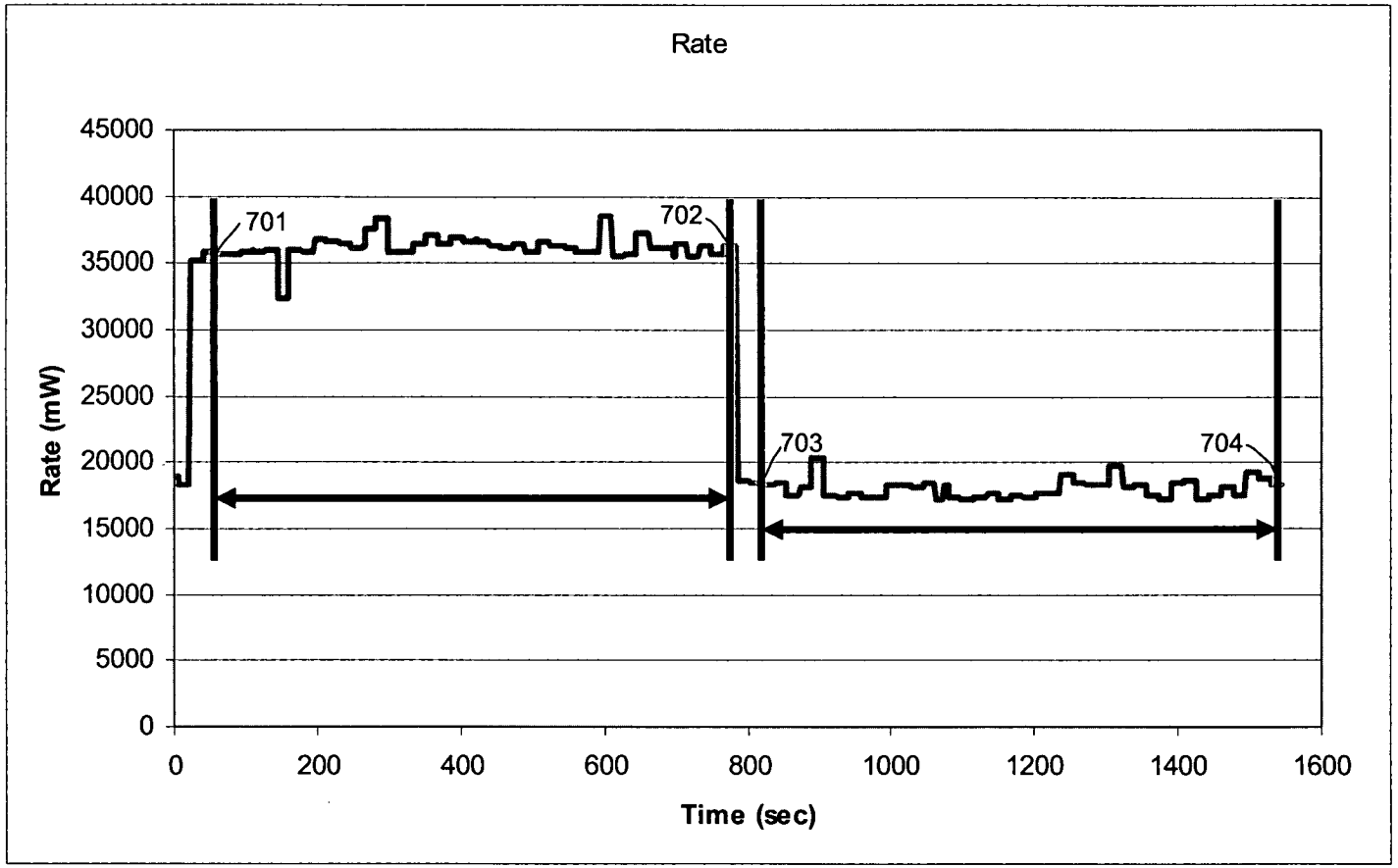
Rate
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Rate (mW)
0
200
400
600
800
1000
1200
1400
1600
Time (sec)
701
702
703
704

FIG. 7

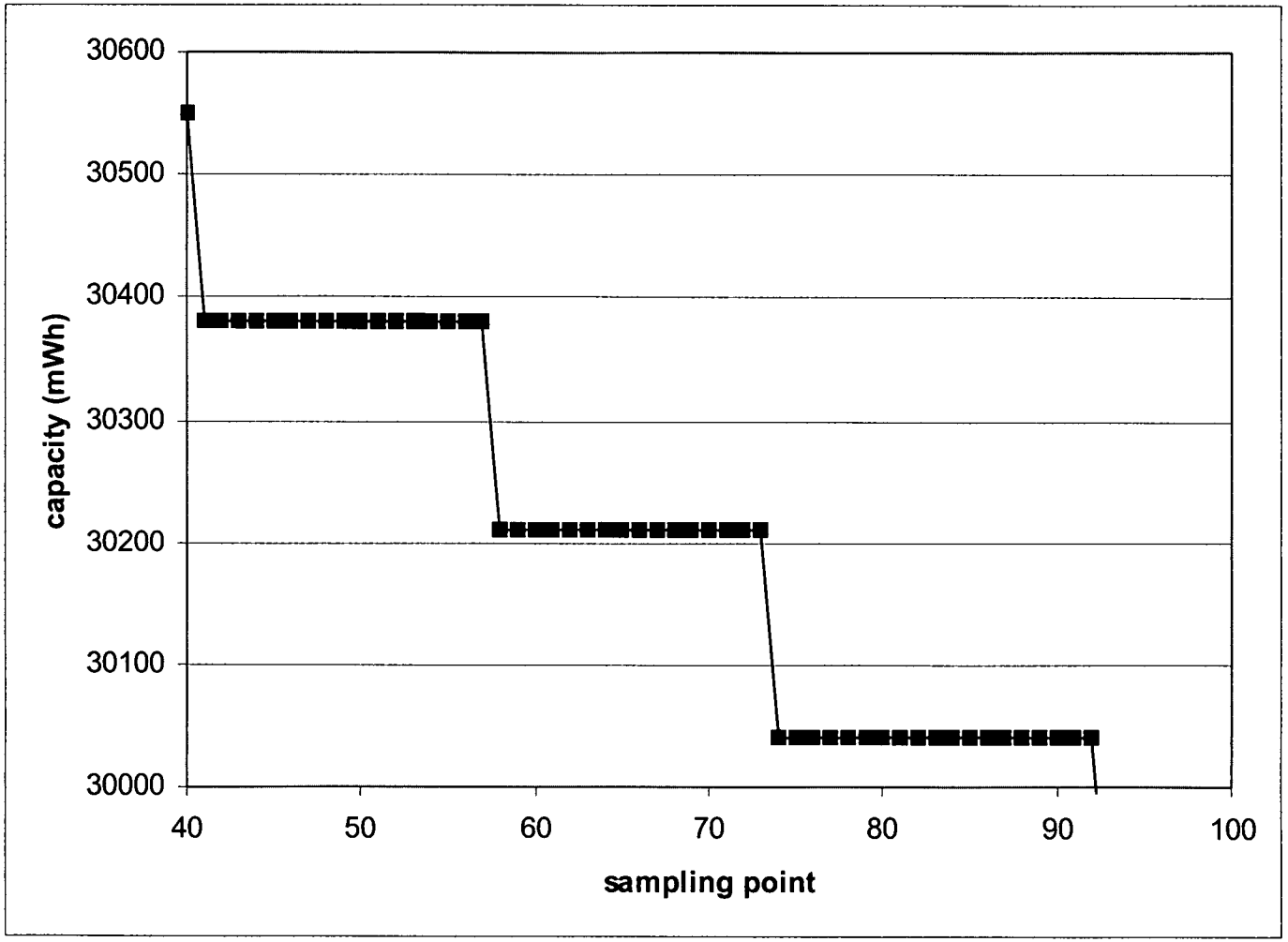
30600
30500
30400
30300
30200
30100
30000
capacity (mWh)
40
50
60
70
80
90
100
sampling point

FIG. 8

901	ELAPSED TIME OF PROCESS	758.6 SEC
902	ABSOLUTE POWER (POWER CAPACITY)	7572 MWH
903	BACKGROUND POWER (POWER CAPACITY)	3847 MWH
904	NET POWER (POWER CAPACITY)	3725 MWH
905	ABSOLUTE POWER (DRAIN RATE)	7585 MWH
906	BACKGROUND POWER (DRAIN RATE)	3832 MWH
907	NET POWER (DRAIN RATE)	3753 MWH
908	POWER CAPACITY UPDATE INTERVAL	19 SEC
909	DRAIN RATE UPDATE INTERVAL	19 SEC
910	SYSTEMATIC ERROR	.03

FIG. 9